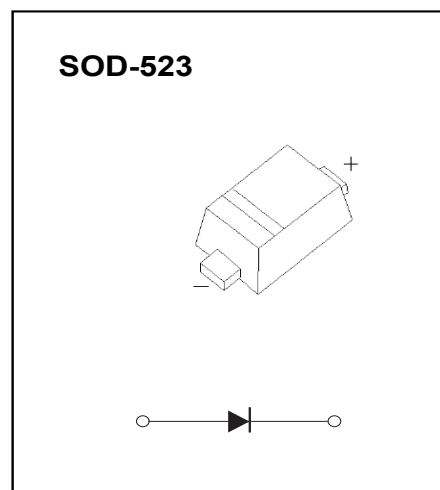
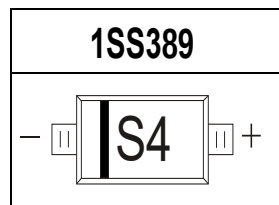


SOD-523 Plastic-Encapsulate Diodes**1SS389****SCHOTTKY BARRIER DIODE****FEATURES**

- Low Forward Voltage Drop
- High Speed, High Reliability

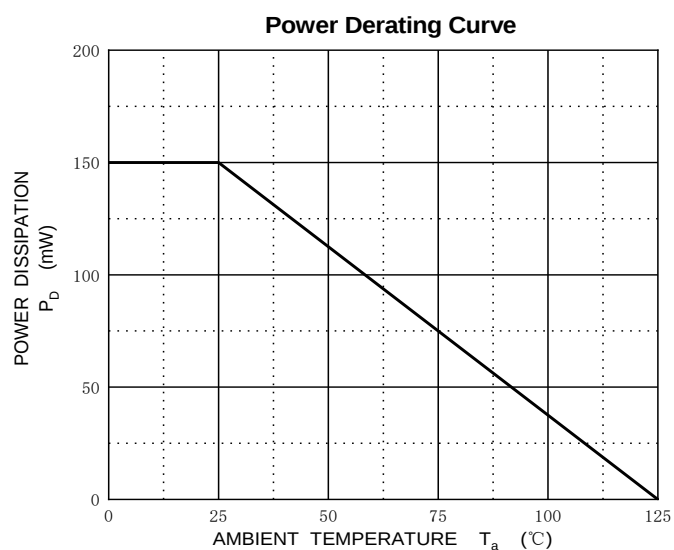
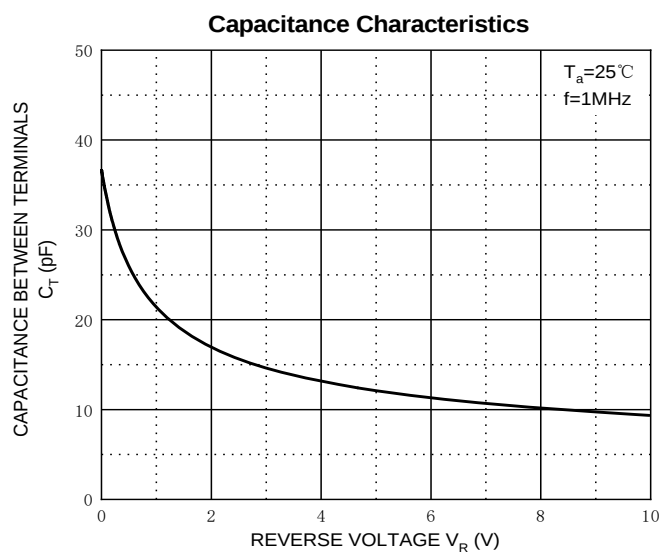
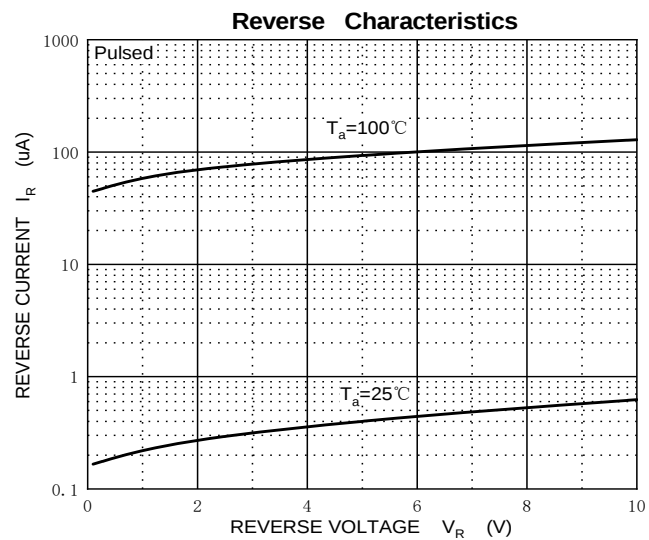
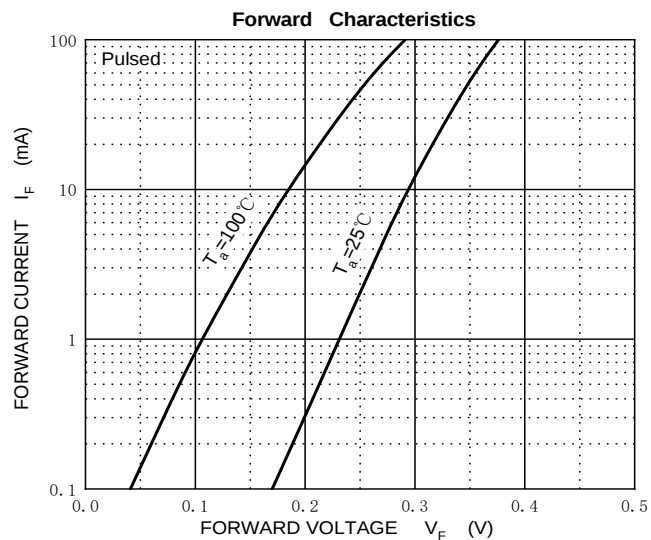
MARKING**MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	10	V
I_O	Continuous Forward Current	100	mA
I_{FM}	Peak Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	1	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	667	$^{\circ}\text{C/W}$
T_j	Operating Junction Temperature Range	$-40\sim+125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	$-55\sim+150$	$^{\circ}\text{C}$

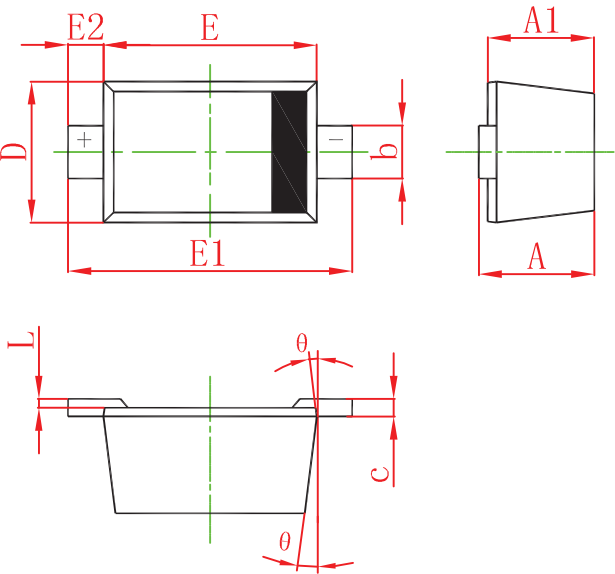
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	10			V
Reverse current	I_R	$V_R=10\text{V}$			20	μA
Forward voltage	V_F	$I_F=1\text{mA}$		0.18		V
		$I_F=5\text{mA}$			0.3	
		$I_F=100\text{mA}$			0.5	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			40	pF

Typical Characteristics

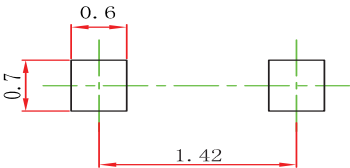


Package Outline Dimensions (SOD-523)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

Suggested Pad Layout (SOD-523)



- Note:
- 1.Controlling dimension:in millimeters.
 - 2.General tolerance:± 0.05mm.
 - 3.The pad layout is for reference purposes only.